

What is claimed is:

1. A system for processing information related to laboratory tests and results, comprising:

5           an interface processor for receiving user entered data identifying a laboratory test result of a patient and for receiving user entered data identifying an expected result of said laboratory test;

          a validation processor for comparing said laboratory test result with said expected test result and identifying a first failure condition in response to said laboratory  
10 test result failing to match said expected test result; and

          a result processor for initiating generation of an alert message to a user indicating said first failure condition.

2. A system according to claim 1, wherein said interface processor  
15 further receives user entered data identifying at least one further laboratory test result of said patient and user entered data identifying at least one further expected laboratory test result of said at least one further laboratory test; and

          wherein said validation processor compares said at least one further laboratory test result with said at least one further expected laboratory test result  
20 and identifies a second failure condition in response to said at least one further laboratory test result of said patient failing to match said at least one further expected laboratory test result; and

          wherein said result processor initiates generation of an alert message to a user indicating said second failure condition.

25 3. A system according to claim 1, wherein said interface processor further receives user entered data identifying a plurality of validation pre-conditions for validating said laboratory test of said patient;

          wherein said validation processor identifies a third failure  
30 condition when at least one of said plurality of validation pre-conditions are not satisfied; and

          wherein said result processor initiates generation of an alert message to a user indicating said third failure condition.

4. A system according to claim 1, wherein

5 said received user entered data identifying an expected result of said laboratory test comprises at least one of, (a) an identifier indicating a culture is resistant to a test compound, (b) an identifier indicating a culture is sensitive to a test compound, (c) an identifier indicating a positive test result and (d) an identifier indicating a negative test result.

10 5. A system according to claim 1, wherein

said received user entered data identifying an expected result of said laboratory test comprises a quantity identifier indicating presence of an approximate quantity of microbes per unit area of a culture.

15 6. A system according to claim 5, wherein

said quantity identifier identifies a qualitative range of said quantity of microbes per unit area, including at least one of, (a) an identifier indicating "few" and (b) an identifier indicating "many".

20 7. A system according to claim 5, wherein

said microbes comprise at least one of, (a) a bacteria, (b) a fungi, (c) a parasite and (d) a virus.

25 8. A system according to claim 1, wherein

said received user entered data identifying an expected result of said laboratory test identifies at least one of, (a) a count value of number of microbes present per unit area of a culture, (b) a color of a microbe indicator, (c) a color change of a microbe indicator.

30 9. A system according to claim 1, wherein

said received user entered data identifies a plurality of expected results of said laboratory test and said validation processor comparing a plurality of laboratory test results with said plurality of expected results and identifies a failure condition in response

to a predetermined condition if at least one of said plurality of laboratory test results fails to match a corresponding one of said plurality of expected results.

10. A system according to claim 1, wherein

5        said interface processor receives user entered data identifying a plurality of results expected for a corresponding plurality of test results derived at different time stages of a laboratory test,

      said validation processor compares an individual result of said plurality of expected test results with a corresponding individual laboratory test result of said  
10       plurality of test results and identifies a failure condition in response to said individual laboratory test result failing to match said corresponding expected test result; and

      said result processor initiates generation of an alert message to a user indicating a failure condition of said individual test performed at a particular time stage of said different time stages.

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11. A system according to claim 1, wherein

      said result processor initiates generation of an alert message to a user in response to occurrence of said failure condition, said message at least one of, (a) prompting a user to initiate performance of another predetermined laboratory test, (b)  
20       informing a user of potential reasons for said failure condition, (c) prompting a user to repeat said laboratory test, (d) prompting a user with a user predetermined message and (e) an identification of an expected result and actual result of said laboratory test.

12. A system according to claim 3, wherein

25       one of said plurality of validation preconditions corresponds to an elapsed time period to wait before comparing said laboratory test result with said expected test result, said elapsed time period being a time period following initiation of said laboratory test.

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13. A system according to claim 1, wherein

      said result processor initiates generation of an alert message to a user prompting a user to enter an override command indicating whether said failure condition is to be overridden.

14. A system according to claim 13, wherein  
said result processor initiates storage of a record indicating said failure  
condition was overridden, in response to said user override command,  
said record at least one of, (a) being accessible by an authorized person,  
5 (b) providing an audit trail indicating a person entering said override command and (c)  
being incorporated in a report identifying override command occurrences.

15. A system according to claim 13, including  
an authorization processor for determining whether a user is authorized to  
10 override said failure condition and to inhibit override in response to a determination said  
user is unauthorized

16. A system according to claim 1, wherein  
said result processor initiates generation of an alert message with a  
15 plurality of different warning severity message levels.

17. A user interface system for use processing information related to  
laboratory tests and results, comprising:  
a display processor for initiating generation of at least one display image  
20 including display elements for,  
enabling a user to enter data identifying a laboratory test result of a  
patient and to enter data identifying an expected result of said laboratory test, and for  
displaying an alert message to a user indicating a failure condition  
derived by comparing said laboratory test result with said expected test result and by  
25 determining a failure condition in response to said laboratory test result failing to match  
said expected test result.

18. A user interface system according to claim 17, wherein  
said at least one display image includes display elements for enabling a  
30 user to enter data identifying an expected result of said laboratory test comprising at least  
one of, (a) an identifier indicating a culture is resistant to a test compound, (b) an  
identifier indicating a culture is sensitive to a test compound, (c) an identifier indicating a  
positive test result and (d) an identifier indicating a negative test result and (e) a quantity

identifier indicating presence of an approximate quantity of microbes per unit area of a culture.

19. A user interface system according to claim 17, wherein

5       said at least one display image includes display elements for displaying an alert message to a user prompting a user to enter an override command indicating whether said failure condition is to be overridden.

10       20. A system for processing information related to laboratory tests and results, comprising:

          an interface processor for receiving user entered data identifying a plurality of results expected for a corresponding plurality of test results derived at different time stages of a laboratory test;

15       a validation processor for comparing an individual result of said plurality of expected test results with a corresponding individual laboratory test result of said plurality of test results and identifies a failure condition in response to said individual laboratory test result failing to match said corresponding expected test result; and

20       a result processor for initiating generation of an alert message to a user indicating a failure condition of said individual test performed at a particular time stage of said different time stages.

21. A method for processing information related to laboratory tests and results, comprising the activities of:

25       receiving user entered data identifying a laboratory test result of a patient;  
      receiving user entered data identifying an expected result of said laboratory test;

      comparing said laboratory test result with said expected test result;  
      identifying a failure condition in response to said laboratory test result failing to match said expected test result; and

30       initiating generation of an alert message to a user indicating said failure condition.

22. A method for processing information related to laboratory tests and results, comprising the activities of:

receiving user entered data identifying a plurality of results expected for a corresponding plurality of test results derived at different time stages of a laboratory test;

comparing an individual result of said plurality of expected test results with a corresponding individual laboratory test result of said plurality of test results;

5 identifying a failure condition in response to said individual laboratory test result failing to match said corresponding expected test result; and

initiating generation of an alert message to a user indicating a failure condition of said individual test performed at a particular time stage of said different time stages.

10 23. A user interface system for processing information related to laboratory tests and results, comprising:

a display processor for initiating generation of at least one display image including display elements for,

15 enabling a user to enter data identifying an expected laboratory test result, a laboratory test result; at least one further expected laboratory test result, at least one further laboratory test result; and a plurality of validation pre-conditions for validating said first laboratory test, and for

20 displaying an alert message to a user indicating a failure condition derived by,

comparing said expected laboratory test result with said laboratory test result and identifying a first failure condition in response to said laboratory test result failing to match said expected laboratory test result;

25 comparing said at least one further laboratory test result with said at least one further expected laboratory test result and identifying a second failure condition in response to said at least one further laboratory test result failing to match said at least one further expected laboratory test result; and

determining that at least one of said plurality of validation pre-conditions are not satisfied.

30 24. A method for processing information related to laboratory tests and results, comprising:

a) receiving user entered data comprising:

an expected first laboratory test result of a first laboratory test requiring validation processing;

an actual first laboratory test result;

5     at least one further expected laboratory test result of at least one further laboratory test for validating said first laboratory test; and

at least one further actual laboratory test result of said at least one further laboratory test; and

a plurality of validation pre-conditions;

10     b) comparing said expected first laboratory test result with said actual first laboratory test result and identifying a first failure condition in response to said expected first laboratory test result failing to match said actual first laboratory test result;

15     c) comparing said at least one further expected laboratory test result with said at least one further actual laboratory test result and identifying a second failure condition in response to said at least one further expected laboratory test result failing to match said at least one further actual laboratory test result; and

d) identifying a third failure condition when said plurality of validation pre-conditions are not satisfied.

20     25.     The method of Claim 24, further comprising the steps of initiating generation of an alert message to a user responsive to said first, second or third failure conditions.